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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,089	09/17/2003	Hiroyuki Sekiguchi	03886/0200058-US0	3720

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EXAMINER	
MANCHO, RONNIE M	
ART UNIT	PAPER NUMBER
3663	

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/664,089	SEKIGUCHI, HIROYUKI	
	Examiner	Art Unit	
	Ronnie Mancho	3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 August 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2 and 4-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 4-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1, 2, 4-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In amended independent claim 1, the applicant has added the new matter "path that is *predicted*". Nowhere in the original disclosure is the claimed "predicted" disclosed. The applicant claims that the prior art does not disclose, "predicted" even though the applicant himself cannot satisfy the prima-facie burden to prove the disclosure of "a path that is predicted".

Further, in claim 1, the applicant claims "relative evacuation possibility". This is not an art recognized word and applicant has not disclosed what is meant by or how "relative evacuation possibility" is achieved to one skilled in the art. No where in the application are the words "relative evacuation" disclosed.

In addition, in claim 2, the applicant claims "said own vehicle traveling path estimating means estimate an own vehicle traveling path based on the road information as *a first own vehicle traveling path,* estimates an own vehicle traveling path based on said traveling condition of the own vehicle as *a second own vehicle traveling path*, and estimates *a new own vehicle*

traveling path based on said first own vehicle traveling path and said second own vehicle traveling path". These limitations indicate three different paths, but the specification or the drawings do not clearly disclose three distinct paths as claimed.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 2, 4-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the applicant claims "relative evacuation possibility". This is not an art recognized word and applicant has not disclosed what is meant by or how "relative evacuation possibility" is achieved to one skilled in the art.

MPEP 2173. Claims Must Particularly Point Out and Distinctly Claim the Invention.

The primary purpose of this requirement of definiteness of claim language is to ensure that the scope of the claims is clear so the public is informed of the boundaries of what constitutes infringement of the patent. A secondary purpose is to provide a clear measure of what applicants regard as the invention so that it can be determined whether the claimed invention meets all the criteria for patentability and whether the specification meets the criteria of 35 U.S.C. 112, first paragraph with respect to the claimed invention.

MPEP 2173.01 [R-2] Claim Terminology.

A fundamental principle contained in 35 U.S.C. 112, second paragraph is that applicants

are their own lexicographers. They can define in the claims what they regard as their invention essentially in whatever terms they choose so long as **>any special meaning assigned to a term is clearly set forth in the specification. See MPEP § 2111.01.<Applicant may use functional language, alternative expressions, negative limitations, or any style of expression or format of claim which makes clear the boundaries of the subject matter for which protection is sought. As noted by the court in In re Swinehart, 439 F.2d 210, 160 USPQ 226 (CCPA 1971), a claim may not be rejected solely because of the type of language used to define the subject matter for which patent protection is sought.

Further in claim 6, the applicant claims, "the evacuation possibility is high". This is indefinite. What one person considers "high" may be low to another person. The applicant further claims "the numerical values" in claim 6. There is no antecedent basis for the limitation.

In claim 8, "clears the sum" lacks antecedent basis. The applicant further claims "the preceding vehicle is invisible". It is not understood if the applicant means invisible to the naked eye or invisible to radar for example. That is, the applicant has not disclosed any apparatus used for view the vehicle. Further in claim 8, the applicant claims, "relative evacuation of the preceding vehicle is low". This is indefinite. What one person considers "low" may be high to another person. The applicant further claims "the numerical values" in claim 6. There is no antecedent basis for the limitation. It is should be clear that the applicant is not consistent with the claim language. That is at one time, the applicant claims "relative evacuation" and at another time, the applicant claims "evacuation".

Amended claims 8& 9 are verbose and not clear.

In claim 10, "the traveling control system" lacks antecedent basis.

The rest of the claims are rejected for their dependence on a rejected base claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 4-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Lemelson et al (5983161).

Regarding claim 1, Lemelson et al (abstract) disclose a vehicle surroundings monitoring apparatus, comprising:

frontal information detecting means (54, 56; fig. 3) for detecting at least solid object information in front of an own vehicle;

preceding vehicle recognizing means (54, 56; fig. 3) for recognizing a preceding vehicle based on said solid object information;

own vehicle traveling path estimating means (54, 56; fig. 3) for estimating a traveling path that is predicted for said own vehicle to travel on a road ahead of the own vehicle as a traveling path of the own vehicle;

first evacuation possibility judging means 54 for judging a relative evacuation possibility of said preceding vehicle to evacuate from the state of being the preceding vehicle of the own vehicle according to the position of said preceding vehicle and the position of said own vehicle;

second evacuation possibility judging means 56 (col. 20, lines 55-67) for judging a relative evacuation possibility of said preceding vehicle to evacuate from the state of being the preceding vehicle of the own vehicle according to information of a solid object other than said preceding vehicle (columns 19, 20, 27, 29); and

preceding vehicle evacuation possibility judging means 38 (col. 24, lines 33-44) for judging a possibility of relative evacuation of said preceding vehicle to evacuate from the state of being the preceding vehicle of the own vehicle (columns 19, 20; 27, 29) according to the possibility of relative evacuation by the first evacuation possibility judging means and said possibility of relative evacuation by the second evacuation possibility judging means.

Regarding claim 2, Lemelson et al (columns 19, 20, 27, 29) disclose the vehicle surroundings monitoring apparatus described in claim 1, wherein said frontal information detecting means detect road information in front of said own vehicle in addition to said solid object information and have traveling conditions detecting means for detecting a traveling condition of said own vehicle, and

said own vehicle traveling path estimating means estimate an own vehicle traveling path based on the road information as a first own vehicle traveling path, estimates an own vehicle traveling path based on said traveling condition of the own vehicle as a second own vehicle traveling path, and estimates a new own vehicle traveling path based on said first own vehicle traveling path and said second own vehicle traveling path.

Regarding claim 4, Lemelson et al (columns 19, 20, 27, 29) disclose the vehicle surroundings monitoring apparatus described in claim 1, wherein said first evacuation possibility judging means judge the possibility of the relative evacuation of said preceding vehicle when

viewed from said own vehicle according to a frontal distance of said preceding vehicle from said own vehicle and a lateral separation of said preceding vehicle from said new own traveling path.

Regarding claim 5, Lemelson et al (columns 19, 20, 27, 29) disclose the vehicle surroundings monitoring apparatus described in claim 1, wherein said preceding vehicle evacuation possibility judging means judge that when said preceding vehicle exists farther than a preestablished distance, there is no possibility of relative evacuation of said preceding vehicle.

Regarding claim 6, Lemelson et al (columns 19, 20, 27, 29) disclose the vehicle surroundings monitoring apparatus described in claim 1, wherein said first evacuation possibility judging means provide a plurality of distance divisions in front of said own vehicle, establish left and right evacuation possibility judging regions around said new own traveling path at said respective distance divisions, and when said preceding vehicle exists in said evacuation possibility judging regions represent said first possibility as a first specified numerical evacuation possibility corresponding to said respective evacuation judging regions and said preceding vehicle evacuation possibility judging means judge that there is a possibility of relative evacuation of said preceding vehicle when viewed from said own vehicle, in case where the sum of said first specified numerical evacuation possibility exceeds a threshold value.

Regarding claim 7, Lemelson et al (columns 19, 20, 27, 29) disclose the vehicle surroundings monitoring apparatus according to in claim 6, wherein said distance divisions provided by the first evacuation possibility judging means comprise a first division near the own vehicle, a second division in front of the first division and a third division in front of the second division.

Regarding claim 8, Lemelson et al (columns 19, 20, 27, 29) disclose the vehicle surroundings monitoring apparatus according to claim 6, wherein when said preceding vehicle exists in a pre-established region in the vicinity of said new own traveling path, said first evacuation possibility judging means clears the sum said numerical values expressing that the evacuation possibility is high, as judged by the preceding vehicle evacuation possibility judging means, and

when said preceding vehicle does not exist in said region in the vicinity of said traveling path of the own vehicle and in the respective evacuation possibility judging regions, the first evacuation possibility judging means judges that the possibility of the relative evacuation of the preceding vehicle is low, reduces the sum of said numerical values expression that the evacuation possibility is high, as judged by the preceding vehicle evacuation possibility judging means, to a predetermined value that expresses the evacuation possibility.

Regarding claim 9, Lemelson et al (columns 19, 20, 27, 29) disclose the vehicle surroundings monitoring apparatus according to claim 6, wherein when a solid object, moving forward and different from said preceding vehicle, exists in a traveling region of the own vehicle in the vicinity of the preceding vehicle, the second evacuation possibility judging means judges that the evacuation possibility is high and expresses the evacuation possibility as a specified numerical value, and adds the numerical value to the sum of said numerical values expressing that the evacuation possibility is high, as judged by the preceding evacuation possibility judging means.

Regarding claim 10, Lemelson et al (columns 19, 20, 27, 29) disclose the traveling control system for controlling a traveling of an own vehicle wherein:

the own vehicle is provided with the vehicle surroundings monitoring apparatus according to claims 1, and information of an evacuation possibility of the preceding vehicle by the vehicle surroundings monitoring apparatus is information of the preceding vehicle.

Double Patenting

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. Claims 1, 2, 4-10 provisionally rejected on the ground of nonstatutory double patenting over claims 1,2, 4-14 of copending Application No. 10651489. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: "a vehicle surrounding monitoring apparatus"

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Response to Arguments

9. Applicant's arguments filed 8-15-05 have been fully considered but they are not persuasive.

The applicant is arguing that the prior art does not disclose" a traveling path is predicted". The examiner disagrees. Nowhere in the original disclosure is the claimed "predicted path" disclosed. The applicant claims that the prior art does not disclose, "predicted" even though the applicant himself cannot satisfy the prima-facie burden to prove the disclosure of "a path that is predicted". The prior art disclose a vehicle traveling on a path ahead of the vehicle similar to that of the applicant.

Next, the applicant argues that the prior art does not disclose evacuation possibility judging means which judge a possibility for the preceding vehicle to evacuate from the state of being the preceding vehicle to the own vehicle. The examiner disagrees. The applicant' argument is based on a functional language claim in an apparatus claim. In addition, this limitation has a 112 rejection above that needs to be overcome.

MPEP 2114 [R-1] *Apparatus and Article Claims — Functional Language*

For a discussion of case law which provides guidance in interpreting the functional portion of means-plus-function limitations see MPEP § 2181 - § 2186.

APPARATUS CLAIMS MUST BE STRUCTU-RALLY DISTINGUISHABLE FROM THE PRIOR ART

>While features of an apparatus may be recited either structurally or functionally, claims<directed to >an< apparatus must be distinguished from the prior art in terms of structure rather than function. >In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997) (The absence of a disclosure in a prior art reference relating to function did not defeat the Board's finding of anticipation of claimed apparatus because the limitations at issue were found to be inherent in the prior art reference); see also In re Swinehart, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971);< In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original).

MANNER OF OPERATING THE DEVICE DOES NOT DIFFERENTIATE APPARATUS CLAIM FROM THE PRIOR ART

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Exparte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987) (The preamble of claim1 recited that the apparatus was "for mixing flowing developer material" and the body of the claim recited "means for mixing ..., said mixing means being stationary and completely submerged in the developer material". The claim was rejected over a reference which taught all the structural limitations of the claim for the intended use of mixing flowing developer. However, the mixer was only

partially submerged in the developer material. The Board held that the amount of submersion is immaterial to the structure of the mixer and thus the claim was properly rejected.).

It is believed that the rejections are proper and stand.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Communication

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronnie Mancho whose telephone number is 571-272-6984. The examiner can normally be reached on Mon-Thurs: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ronnie Mancho
Examiner
Art Unit 3663

11/8/05

JACK KEITH
SUPERVISORY PATENT EXAMINER